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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/589,049	06/06/2000	William James Dhimitri	30566.99US11	9635

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EXAMINER

GOOD JOHNSON, MOTILEWA

ART UNIT PAPER NUMBER

2672

DATE MAILED: 02/12/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/589,049

Applicant(s)

DHIMITRI ET AL. D

Examiner

Motilewa A. Good-Johnson

Art Unit

2672

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 10 December 2002.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                             | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____  |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)         | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other: _____                                    |

### DETAILED ACTION

1. This office action is responsive to the following communications: Application, filed on 06/06/2000; IDS, paper #2, filed on 07/21/2000; Amendment A, filed 12/10/2002.

#### **This office action is made final**

2. Claims 1-18 are pending in this application. Claims 1, 7 and 13 are independent claims. Claims 1, 2, 7, 8, 13 and 14 have been amended.
3. The present title of the application is "Dynamic Positioning and Alignment Aids for Shape Objects" (as originally filed).

### ***Double Patenting***

4. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

5. Claims 1-31 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-42 of U.S. Patent No.

Art Unit: 2672

6,064,386. Although the conflicting claims are not identical, they are not patentably distinct from each other because:

Claims 1 and 2 of Patent Number 6,064,386 and claims 1-4 of application, both claim displaying information on a monitor, creating a geometric framework for the shape - positioning the first object proximate to the second object, displaying plugs and creating sockets and modifying the information to the attachment point along a predefined range.

Claims 3-6 of Patent Number 6,064,386 and claims 3-6 of application, both claims automatically coupling the second object to a first object along a defined range, and further modifying the object shape appearance.

Claims 7- 18 are rejected based upon similar rational as above claims 1-6 respectively.

### ***Claim Rejections - 35 USC § 102***

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claims 1-18 are rejected under 35 U.S.C. 102(b) as being anticipated by

Arsenault et al., U.S. Patent Number 5,894,310, "Intelligent Shapes for Authoring Three-Dimensional Models", class 345/619, 04/13/1999.

As per independent claim 1, a method of display information . . . comprising: displaying a first object . . . ; displaying a second object on the monitor; positioning the first object proximate to the second object . . . ; displaying plugs on the first object . . . plugs indicate one or more respective attachment points . . . ; dynamically creating a socket on the second object . . . socket indicates an attachment point between the first object and the second object; and automatically coupling the second object to the first object at the attachment point. Arsenault discloses modeling shapes and solids with intelligence and that intelligent shape modeling may include parameters specifying how the shape is to interact with other shapes, how the snap into place with other shapes and maintaining a certain distance with other shapes, col. 3. Arsenault further discloses a plug and socket configuration for the bus, however Arsenault also discloses a snap in and interlock capability, col. 4.

With respect to dependent claim 2, an appearance of the displayed second object on the monitor is modified when a type of the plug on the first object does not match . . . Arsenault discloses functions for variable context change notification and further discloses callbacks and the actual communications may include interface definitions such as detach context, col. 16, lines 4-46.

With respect to dependent claim 3, automatically coupling further comprises the step of positioning the first object to align the plug of the first object to the created socket of the second object. Arsenault discloses a snap in capability and allowing a shape to interlock with another shape automatically, col. 4, lines 1-26. Arsenault further

Art Unit: 2672

discloses the shapes contain attachment points that know how to glue to one another, col. 6, lines 1-2.

With respect to dependent claim 4, automatically coupling further comprises the step of automatically coupling the attachment point of the second object to the first object along a defined range . . . Arsenault discloses a disk to snap onto the end of a cylinder when the disk is dragged into proximity with the cylinder, col. 9, lines 63-67.

With respect to dependent claim 5, deleting the created socket when the plug of the first object is no longer proximate to the second object. . . Arsenault discloses shape data structure which implements API function calls and further discloses a remove component and remove all components function call, col. 14, lines 36-67 to col. 15, lines 1-27.

With respect to dependent claim 6, deleting the created socket when no plugs are attached to the created socket. . . Arsenault discloses shape data structure which implements API function calls and further discloses a remove component and remove all components function call, col. 14, lines 36-67 to col. 15, lines 1-27.

As per independent claims 7 and 13 and dependent claims 8-12 and 4-18, they are rejected based upon similar rational as above independent claim 1 and dependent claims 2-6 respectively.

***Conclusion***

8. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

***Response to Arguments***

9. Applicant's arguments filed 12/10/2002 have been fully considered but they are not persuasive.

Applicant argues that Arsenault fails to disclose dynamically creating a socket and creating a socket when a plug of a first object is place proximate to a second. Arsenault discloses a snap in and interlock of a shape automatically to establish a new position and further discloses deforming the other shape when it comes close to the other shape as a dynamic behavior of the shape, col. 4, lines 1-26. Arsenault discloses components are dynamic and can be added and or removed, col. 6, lines 37-38. Thus it is inherent that a component of a snap and lock feature would be the interconnecting

Art Unit: 2672

features, such as a socket and plug configuration or any other configuration. Arsenault discloses intelligent behavior of connections and relationships of shape properties, col. 3, lines 12-67. Thus it is further inherent that an intelligent behavior of a connection would be the attachment features. Arsenault discloses an example given of a sculpting a shape and that the user drops a sculpting shape onto another shape using a drag and drop technique and in response the hole is orientated into the shape relative to the shape being dropped on, col. 22, lines 1-16. Arsenault discloses shape properties and dynamic behavior, col. 4, lines 1-18. It is inherent that an intelligent behavior of a snap in and interlock feature would be to deform the shape, such as adding a snapping feature, when it comes close to, or in proximity with, another shape.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Motilewa A. Good-Johnson whose telephone number is (703) 305-3939. The examiner can normally be reached on Monday - Friday 8:30 AM - 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mike Razavi can be reached on (703) 305-4713. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9314 for regular communications and (703) 872-9314 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 306-0377.



Application/Control Number: 09/589,049  
Art Unit: 2672

Page 8

Motilewa A. Good-Johnson  
Examiner  
Art Unit 2672

mgj  
February 10, 2003

A handwritten signature in black ink, appearing to be 'MR', with a long horizontal line extending to the right.

**MICHAEL RAZAVI**  
**SUPERVISORY PATENT EXAMINER**  
**TECHNOLOGY CENTER 2600**